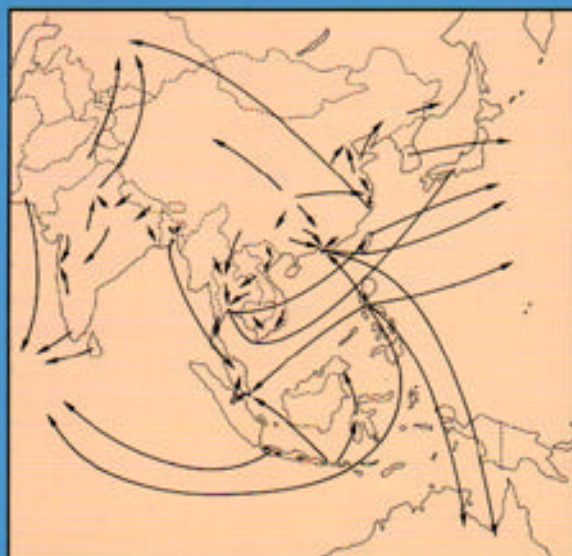




United Nations Development Programme
South East Asia HIV and Development Project

POPULATION MOBILITY AND
HIV VULNERABILITY IN SOUTH EAST ASIA
An Assessment and Analysis



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Population Mobility and HIV Vulnerability in South East Asia: An Assessment and Analysis

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FOREWORD

In recent years, the static concept of “high risk groups” has been shown to be insufficient in mapping the relationships between internal and external population movement on the one hand and the transmission of HIV/AIDS on the other. Many attempts to survey population movement tend to omit the bulk of short-term movements between villages and cities that are so important throughout Southeast Asia. This circulation of people forms complex networks of continuous contact between origins and destinations that can serve as conduits for the passage of money in the form of remittances, of goods and ideas, and of disease.

Mobile populations, such as long-distance truck drivers, commercial sex workers, seafarers, migrant workers and irregular or illegal migrants, come in contact with local communities, including those providing informal and formal sexual services often under the guise of restaurants, bars, barbershops and guesthouses. Interaction among diverse sectors of mobile populations forming different patterns may intersect at certain points. The behaviour and practice of the mobile populations and that of the stationary community population with which they come into contact synergistically propels the acceleration of HIV in areas previously isolated from external contacts.

To respond to this challenge, UNDP South East Asia HIV and Development Project (SEAHIV-UNDP) established its focus on the linkages between development, population movement and HIV/AIDS. An ASEAN workshop from 10 - 12 November 1999 in Chiang Rai, Thailand was organized by SEAHIV-UNDP to support the Royal Thai Government in its role as the ASEAN Taskforce on AIDS focal point on Population Movement and HIV/AIDS. Collaborators included the WHO Regional Office for South East Asia; Family Health International Asia Regional Office and SEAMEO-CHASPPAR, a GTZ funded research programme in Thailand.

The objective is to formulate joint action plans among cluster countries in South East Asia who share the challenge of dealing with population movement and HIV. This paper is a technical review of existing data to identify the significance and the location of the various types of migration in ASEAN region, paying special attention to indicate the intersection/interaction points and patterns. It identifies and examines behaviour and practice of mobile populations associated with the spread of HIV/AIDS, to point out both vulnerability factors as well as possible “resilience factors” to HIV/AIDS.

The paper aims to produce strategic recommendations for collaboration among countries in the region. It is envisioned that future joint action plans will consist of geographic clusters recognizing the relationships between and interactions among individual countries and sectors in the region. Approaches effective in curbing the spread of HIV/AIDS in specific sectoral groupings and their interactions will be sought with due regard for the role of the private sector. The recommendations generated from the Chiang Rai workshop were fully endorsed by the ASEAN Taskforce on AIDS.

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EXECUTIVE SUMMARY

The impact of the movement of people on the spread of HIV/AIDS is both obvious and complex, but much of the empirical basis on which conclusions must be based is weak and may be questioned. The basic thesis of this paper is that existing work has tended to focus on only isolated parts of the total mobility system in Southeast Asia and, in so doing, has ignored many of the real mechanisms through which HIV/AIDS is diffused. In addition, migrants, particularly land-based international migrants, appear to be singled out as key actors in the process whereas they are but one link in exceedingly complex networks. A preoccupation with so-called "highly mobile" groups may be distracting attention away from equally important parts of the process.

In reviewing the issue of mobility and HIV/AIDS transmission, three critical issues emerge:

- First, it is not so much the migration that is important as the behaviour of the migrants.
- Second, people who may engage in high-risk behaviour include groups not normally classified as "migrants". Tourists and other short-term movers within the region are often overlooked in analysis.
- Third, by migrating, or more correctly by moving, individuals are thrust into high-risk situations that they may not normally experience in their home environments.

The paper reveals that while policy makers and scholars pay most attention to cross-border migrants, the number of these migrants are extremely small compared with the numbers of people moving within the borders of each country.

An effective intervention strategy needs to focus on all mobility and on risk behaviour at key points in the total mobility system rather than simply on supposedly more mobile groups or on migrants. If international migrants are made the focus of attention, a fear of, and prejudice towards, the outsider is reinforced and attention is shifted away from the real dangers of infection through other forms of mobility that are inherent in the week-to-week, or even day-to-day, behaviour of the population as a whole.

BACKGROUND

The impact of the movement of people on the spread of HIV/AIDS is both obvious and complex. Although AIDS was first reported only as recently as 1981, a voluminous literature already exists on the disease itself and on its relationship with migration. While migrants as vectors for the spread of the disease clearly represent a critical element of the equation, the issue of migrants as particularly vulnerable groups raises associated dimensions that range from public health policy to human rights. A global review summarizing the state of knowledge on migration and HIV/AIDS can be found in Appleyard and Wilson (1998). Haour-Knipe and Rector (1996) provide a perspective from Europe, with Guest (1999) giving an overview of the implications of population mobility for HIV/AIDS in Asia. Much additional insight into the situation in Asia is contained in the essays in Herdt (1997) and Linge and Porter (1997). This paper will attempt to review critically the evidence for the relationship between population mobility and HIV/AIDS by focusing on one region, Southeast Asia, which is taken to include the ten countries of the Association of Southeast Asian Nations (ASEAN) plus the southernmost provinces of China, Yunnan and Guangxi.

The basic thesis of this paper is that existing work has tended to focus on only isolated parts of the total mobility system in Southeast Asia and, in so doing, has ignored many of the real mechanisms through which HIV/AIDS is diffused. In addition, migrants, particularly land-based international migrants, appear to be singled out as key actors in the process whereas they are but one link in exceedingly complex networks. A preoccupation with so-called "highly mobile" groups may be distracting attention away from equally important parts of the process. Much of the empirical basis on which conclusions must be based is weak and many of the assumptions made can be questioned. It is the purpose of this paper to review the existing findings within the context of the patterns of total population mobility in Southeast Asia. Several recurrent themes emerge from the review. These revolve around the intuitively obvious relationship between migration and the spread of HIV/AIDS, the subjectivity of much of the data available for the analysis, the illusion that certain relationships must exist and, finally, the very real importance or substance of the topic.

INTUITION

The impact of migration on the spread of HIV/AIDS is intuitively obvious. The virus can only enter an HIV/AIDS-free area by a carrier and, excluding the role of the transport of contaminated blood products, that carrier must either be an outsider coming into the area with the disease or an insider returning to the area with the disease. Much detective work was carried out to find how the virus first came into the United States of America, for example, and the conclusion was that it was probably brought by vacationers from Haiti, and possibly a single frequent traveller.

Three critical issues emerge. First, it is not so much the migration that is important as the behaviour of the migrants. Even if massive population movements occur between various locations, as long as the movers do not engage in the kinds of activities that are known to spread the disease, that is, unprotected sexual intercourse with male or female partners who already have the disease or the sharing of needles by injecting drug users, again with a carrier of the virus, then diffusion is unlikely to occur. Thus, it is the combination of migration and high-risk behaviour with people who are already carriers that is central to the topic.

The second issue that emerges is that in the movement of people who may engage in high-risk behaviour are groups that might not normally be classified as "migrants". The case of tourists has already been mentioned and, in the mid-1990s, some 30 million tourists were entering the countries of Southeast Asia annually, and some seven million visiting Thailand alone every year (WTO 1999). There are also a whole host of other types of short-term movers within the region who might have the potential to propagate the virus and the issue of high-risk, highly mobile groups will be discussed at much greater length later in the paper. Suffice it to stress here that the term "mobility" is a more appropriate word than "migration", which has a more limited connotation. Thus, the consideration of migration must be extended to encompass all forms of population movement: an emphasis on international movements alone is not a sufficient focus for the analysis.

The third issue is whether, by migrating or more correctly by moving, individuals are thrust into high-risk situations. That is, does the fact of their migration or mobility create a higher propensity for the propagation of HIV/AIDS? Rather than simply spreading existing behaviour, does movement engender new forms of behaviour? There is only one truly universal generalization that can be made about migration: the majority of migrants are young adults. Young adults are precisely those who are most sexually active and thus simple demography implies that there should be some kind of relationship between migration and HIV/AIDS.

SUBJECTIVITY 1: MOBILITY

(a) The measurement of mobility

The estimation of population mobility, and the estimation of the numbers infected with HIV/AIDS, are both fraught with difficulties. Mobility, unlike fertility and mortality, is an element of demographic change which cannot be classified as a unique event, but rather as a continuous process in time and space. The volume of movement captured by censuses and surveys is as much a function of the definitions adopted and the boundaries in time and space employed to identify "a migration" as a reflection of the real situation. It is not the place here to engage in a detailed discussion of the difficulties of measuring population mobility (see, for example, Skeldon 1986) but it must be emphasized that the majority of survey instruments capture but a part, and often a small part, of the total mobility in a country. For example, the 1990 census of Thailand gives the impression of a fairly immobile population with only eight per cent of the population aged five years or more having moved in the previous five-year period. When the definitions are refined, as in the National Migration Survey of Thailand (Chamratrithirong et al. 1995), the proportion can be virtually tripled. Hence, any attempt to associate HIV/AIDS prevalence with population mobility needs to take great care to assess just how that mobility is being measured.

Censuses and many surveys tend to omit the bulk of short-term movement between villages and cities that has been long shown to be so important throughout Southeast Asia (Hugo 1982; Singhanetra-Renard 1981). This circulation of people forms complex networks of continuous contact between origins and destinations that can serve as conduits for the passage of money in the form of remittances, of goods and ideas, and of disease. Population mobility is not often a simple movement from an origin to a destination but a complex system of multiple movements which are extremely difficult and time-consuming to map out. Some of these movements are seasonal: the dry season population of Bangkok is probably about ten per cent larger than the wet season population

(Chamrathirong et al. 1995: 39). Other movements are part of a normal turnover of population associated with a multiplicity of reasons from loss of job to family obligations to retirement.

It is not, however, the internal movement of people that has captured most attention over recent years, but the migrations across international borders. While the movement of peoples across cultural boundaries is not new in Asian history (for example, Chinese and Indian groups played critical roles at various times in the development of Southeast Asian cultures), the migrations of the last twenty years have emerged as a major policy concern. The uneven nature of development in Asia, in association with a decline in fertility, has generated regional patterns of migration as people have moved towards labour-deficit areas. The four "tiger" economies of Asia, Hong Kong, the Republic of Korea, Singapore and Taiwan Province of China, as well as Japan, have all emerged as significant destinations for labour migration over the last twenty years. Malaysia and Thailand, too, have emerged as major targets for population movement from neighbouring countries.

As in the case of internal population mobility, the estimates of cross-border migrants are highly subjective. The principal reason is that many of the movers, in some cases the majority, are illegal or undocumented. Taking the East and Southeast Asian regions together, there are at least 6.6 million migrant workers from other Asian countries (table 1). Taking just the three principal destination countries in Southeast Asia, estimates show that there were 4.2 million foreign workers in Malaysia, Singapore and Thailand in 1997. These estimates refer to immigrant stock of foreign workers only and exclude any accompanying family members, which, in the case of Thailand at least, can be significant. Many other Asian workers go to the Middle East and further afield and an estimate of the total global outmigrant stock of workers for the major countries of origin in Southeast Asia would give just over 8 million for the mid-1990s (table 2). While these estimates refer to the situation before the onset of the Asian economic crisis in mid-1997, it seems likely that the total number of migrants has not been greatly affected by the economic downturn even if the proportions of undocumented workers may have increased relative to legal migrants (see Skeldon 1999).

The issue of borders is clearly critical to the definition of an international migrant. A person who has moved across an international border is classified as an "international migrant". Although most of the land borders in Southeast Asia cross fairly sparsely settled areas, they do nevertheless often bisect long-established trading, cultivation and foraging territories of single ethnic groups. This situation particularly applies in the complex hill terrain along the long borders between Thailand and Myanmar and between Thailand and the Lao People's Democratic Republic and also between Myanmar and China and China and the Lao PDR. These "minority" peoples, culturally distinct from the dominant lowland groups, have moved within their traditionally defined territories which may belong to two or more different sovereign states. Whereas long ago these areas were ill-defined buffer zones between lowland powers, in the world of the territorially defined nation state precise land boundaries have taken on great importance. These minority peoples, whose ready incorporation into the modern state has proven problematic, are still mobile and their position on the periphery of more developed areas complicates any attempt to relate migration and the incidence of HIV/AIDS in these particular areas.

The real patterns of population movement in Southeast Asia are extremely complex. At the risk of oversimplifying, the flows can be envisaged as a series of national migration systems which are based around the largest cities in each country. These centripetal flows are more marked in the more developed countries such as Malaysia and Thailand than in the Lao PDR, although they are also clear in Viet Nam. Both Viet Nam and Indonesia have strong official policies to promote centrifugal flows towards agricultural frontiers but these are more than compensated for by movements to the

largest urban centres. In certain cases, the migration fields of these cities extend across international boundaries to incorporate migrants from adjacent countries and from more distant sources. There are certain clear areas of attraction for cross-border flows in the region under consideration which are to be found in the labour-deficit economies of Malaysia, Singapore, Thailand, the Hong Kong Special Administrative Region of China and the surrounding parts of Guangdong Province, Taiwan Province of China, Japan and the Republic of Korea. It is to the urban centres in these economies that the migrants primarily go: to Bangkok, Chiang Mai and border cities in Thailand; to Kuala Lumpur and Johor in Malaysia, the latter being a de facto part of a greater Singapore-centred urban-industrial region; and to the Tokyo and Nagoya urban conurbations in Japan. Most of these regional centres of urban immigration are also centres of outmigration, of which the flows from Hong Kong, China and southern China to North America and Australasia and from Thailand to Taiwan Province of China, are among the most notable. The Philippines is a major point of origin of migration to many economies in the region and beyond. A general idea of the direction of the principal flows in the 1990s can be captured in Figure 1.

The numbers of cross-border migrants are, despite the attention given to them by policy makers and scholars alike, extremely small compared with the numbers of people moving within the borders of each country. The oft-cited figure of some 100 million “floating migrants” within China, compared with a stock of just 380,000 overseas workers and an annual outflow of perhaps around 100,000 students and settlers, is an extreme case using very “spongy” data. To try to put the various flows in context, a country currently experiencing high levels of AIDS, Thailand can be taken as an example. In the mid-1990s there were about 445,000 workers from Thailand overseas and fewer than 200,000 emigrant Thais living at the main destinations in North America, Australasia and Europe. According to the 1990 population census of Thailand, eight per cent of the population had changed their usual place of residence between 1985 and 1990, or just over four million people. It is well known that the definitions employed in the population census of Thailand capture but a small part of total population movement in the country and, in mid-1992, the National Migration Survey of Thailand was undertaken to try to provide a more comprehensive picture of population movement in the country (Chamrathirong et al. 1995). Where a reference period of one month of residence at the current place of residence is adopted as the key defining period for a “migration” (compared with the three-month definition adopted by the census), the proportion of the Thai population that had changed its place of residence during the five years preceding the survey, increased to 22 per cent. Thus, using this definition, at least 11 million Thais had migrated internally over the five-year period.

It is hardly valid to compare these five-year flows of internal migrants with stock flows of international flows. However, clearly, the numbers of internal movers dwarf the numbers of Thais going overseas, and more importantly, the number of foreigners entering the country who, if we accept estimates towards the higher end of the range, may be in the order of one million. Also, and even more importantly, the estimates of internal migration generated from the National Migration Survey of Thailand, omit much of the short-term mobility that is likely to be a key factor in both the spread of HIV and in the creation of high-risk groups. These aspects will be developed in greater detail in the section on “substance” below. Central to the present argument is the imprecision of the estimates of migration, both internal and international. Also, the whole issue of linkages between internal and international movements remains one of the most under-researched areas in mobility studies. These uncertainties leave us with critical elements of subjectivity in our analysis of the topic.

(b) Composition of the flows

The spatial patterns of migration, however, represent but one dimension of the process; as important is the composition of the flows. It has already been emphasized that the vast majority of migrants are young adults, but there are also gender, education and skill components to the flows. Perhaps a second generalization that can be made about migration flows in Southeast Asia is that there is a trend towards the increasing participation of women in the flows, both internal and international. That the movement of women as sex workers, either across international borders or to international borders, for the purposes of selling sex may be a key agent in the diffusion of HIV/AIDS appears axiomatic, and prostitution, the trafficking of women and the exploitation of vulnerable groups of women and children have emerged as major concerns of governments, multilateral institutions, non-governmental organizations (NGOs) and the public alike.

Before going on to examine the very real dangers of sex work and HIV/AIDS, it is necessary to place the increasing feminization of migration and the trafficking of women in a broader context. Two general points need to be emphasized. First, although the proportion of women in most migrant flows in Southeast Asia is increasing, the number of flows in which women make up the majority of the migrants is still quite limited. The clearest case is the Philippines where, for some considerable time, women have indeed dominated the flows to the largest city, Metropolitan Manila, and the flows to overseas destinations. However, for Thailand, which has unfortunately become associated in the public eye with the international sex trade, the most important overseas flows to Taiwan Province of China and the Middle East are heavily dominated by men. Although there are more women than men in the internal migration flows towards Bangkok, overall within Thailand more men than women migrate.

The second contextual point that needs to be stressed is that the vast majority of female migrants are not entering the sex trade. Factory work and domestic service are much more important. This is not to deny the exploitation and exposure to disease that can be associated with these other occupations but simply redresses the view that female migrants, commercial sex workers and HIV/AIDS are inextricably linked. Many of the female migrants from the Philippines, for example, are family members going overseas to join husbands or other close relatives. Large numbers are nurses and domestic servants. It is certainly true that some illegal, and therefore undocumented, flows are likely to be dominated by women, but objective analysis of trafficking networks (see, for example Derks 1999a; 1999b) shows that these networks are much more complex and varied than might be thought. These aspects will be examined in greater detail below.

The foregoing discussion implicitly raises the issue of the many different types of migrants who may be moving at any one time. Many may be contract labour migrants if they are moving overseas but, excluding any movements that are directly the result of marriage, the majority of those moving internally are looking for some kind of employment. Some of these workers may be professionals and/or highly skilled while the majority may be labourers. There are those going overseas to settle more or less permanently. There are those who have been forced to move for political reasons and are searching for asylum, or those who are moving for environmental reasons, among whom those displaced by the construction of dams figure prominently. Others are moved as a result of policies to resettle minority peoples from highland to lowland areas. There are those who are moving to continue their education. Within several of these categories a distinction between those

who move legally and those who are undocumented can be drawn. The point is clear: there is a complex range of types of migrant categories not all of which are mutually exclusive. An individual may move originally as a student but stay on as a worker or settler, for example. This complexity adds to the subjectivity of migration and the difficulty of identifying hard-and-fast categories from which to draw clear relationships with other phenomena.

SUBJECTIVITY 2: HIV/AIDS

(a) Categories

If the examination of migration presents the analyst with a series of problems, the situation becomes even more uncertain once the consideration of HIV/AIDS is introduced into the equation. Like migrants, the carriers of HIV/AIDS are unlikely to be randomly distributed in any population. Certain populations and individuals show higher rates of risk behaviour than others do. Sex workers and injecting drug users (IDUs) have figured among those particularly at risk. Other groups such as truck drivers, traders and commercial salesmen, soldiers, and fishermen and seamen, all of whom would be assumed to have a high patronage of sex workers, have also been seen to fall into the high-risk category. Police, soldiers and other local administrators who are rotated round local postings, too, may fall into high-risk categories.

However, these categories are often problematic. Soldiers may be in the army for only relatively short periods of time. Fishermen may also be farmers. Even the category of sex worker is not as simple as it might initially appear. While there are full-time sex workers, large numbers act in a part-time capacity depending upon opportunity and even whim. Many of those working in a full-time capacity are unlikely to continue in the trade indefinitely. Sex workers may also be office or factory workers, or agriculturalists, as well as wives and mothers struggling to support their families. They may have a multiplicity of roles and to classify them by a single negative stereotype simplifies and distorts the complex relations in which they are involved. There are also subcategories of sex workers depending upon a multitude of factors which are reflected in the economics of price: from workers in low-cost brothels, to streetwalkers, through high-cost brothels and "fronts" for prostitution in bars and massage parlours, to the "elite" groups of call-girls servicing the luxury hotels. For a comprehensive review of the sex industry in Asia and beyond, see the essays in Lim (1998). The incidence of infection with HIV, as well as the mobility of the worker, will vary by level of participation.

(b) The numbers of those infected

While the categories of high-risk incidence and groups may be "fuzzy", even more problematic from an analytic point of view are estimations of the prevalence of HIV/AIDS itself. The task is made still more difficult by the fairly long incubation period between infection and symptoms of that infection appearing in blood samples. How can the incidence of the spread of the disease be estimated when it is clearly impractical to take blood samples from everyone? The detailed methodologies applied and the assumptions made cannot be discussed here but the surveys upon which the expansion factors are based rarely cover the entire population. Sero-sentinel surveys may be biased towards urban populations and certain sectors of the population may not be covered at all. A significant dimension of subjectivity thus appears in the estimates even if they are the "best guess" numbers currently available. An excellent concise assessment of the available data sources for

Thailand will be found in Im-em (1999b). The number of actual cases observed and the expanded estimates for the total number of cases are given in table 3.

(c) Sex cultures

The centre of the epidemic in Southeast Asia is Thailand, with a significantly higher prevalence in the upper northern provinces, with more than half of the infected people in Thailand coming from these provinces (cited in Im-em 1999a: 158). The prevalence of HIV is rapidly increasing in neighbouring countries, most particularly in Myanmar, China and Cambodia. From a regional perspective, the epicentre of the disease appears to be in the highly accidented terrain of the border areas of Thailand, Myanmar, southern China and the Lao PDR in the so-called "golden triangle" area of opium production. Nevertheless, significant "outliers" of higher prevalence at other points around the Thai border have led to considerable attention being given to these areas (see many of the essays in ARCM 1995; Oppenheimer et al. 1998; Chantavanich et al. 1999a, 1999b; Stern 1998; IOE 1997; UY 1997). The preoccupation with borders in some way is a legacy of a previous concern with refugees and the result of forced migrations. Clearly, very little of the present migration into Thailand is the result of political displacement, but refugee communities, particularly in Africa, are seen to be highly vulnerable to the spread of infections such as HIV/AIDS. Although the refugee has almost disappeared as a major concern in Southeast Asia, internal displacements for dam construction or other infrastructural projects can create communities within national boundaries that may favour the rapid propagation of infection. Operations by military forces in the Shan State of Myanmar have, however, caused people to seek sanctuary in northern Thailand and women from that area are known to have taken up sex work in northern Thai towns and cities.

The reasons why the mountainous transborder area of northern Thailand, Myanmar, southern China and the Lao PDR should have emerged as the epicentre of the epidemic in Southeast Asia are complex but appear to include the following factors:

- These are areas of long-standing trade routes
- The trade in narcotics is extensive, with a relatively high local consumption
- Cash is readily available from trade in border areas
- Sex cultures in which men and woman have been relatively free in the selection of partners
- Multiple sequential partners have been a much more accepted form of behaviour than in other parts of Thailand
- Women are incorporated at a very young age into sex work

The combination of these elements has produced an environment for the explosive propagation of HIV/AIDS. Northern women have long been prized in the Thai sex industry and between 50 and 60 per cent of sex workers in massage and brothels in Bangkok, for example, have been found to come from northern provinces, which account for about one fifth of the national population (Phongpaichit 1982: 12; Boonchalaksi and Guest 1998: 147; also Im-em 1999a: 158). The origins of Thai sex workers are also localized within the northern region itself, with surveys suggesting that over one third of sex workers in Bangkok came from the provinces of Chiang Rai and Phayao in the mid-1990s, with even one specific district in Phayao being known for its supply of girls (Boonchalaksi and Guest 1998: 148-149). The province of Phayao, perhaps not coincidentally, had the highest level of HIV/AIDS in Thailand in the early 1990s (UNAIDS 1998a). Again perhaps not entirely coincidentally, the districts of Chiang Rai and Phayao ranked among the highest in

Thailand in terms of the proportions of women six years of age and older who had no education. Against a national average of 12.7 per cent and an average of 24.5 for the northern region as a whole, 26.6 and 22.7 per cent of the women six years of age and older in Chiang Rai and Phayao respectively were enumerated with no education in the census of 1990. The localized origin of sex workers has also been observed for Indonesia, where Indramayu, a district which accounted for but three per cent of the population of West Java and Jakarta combined, supplied 28 per cent of the sex workers to one of the largest official prostitution complexes in north Jakarta (Jones et al. 1998: 47). Of the 19 subdistricts of Indramayu, seven with easy access to the main road were more noted as origins of the sex workers.

Much is often made of the participation of foreign sex workers in the Thai sex industry although a government survey of establishments in Bangkok suggested that only about 16 per cent of the sex workers were of foreign origin, the majority of these from Myanmar (cited in Boonchalaksi and Guest 1998: 161). Among sex workers in three northern provinces, fully 85 per cent were lowland Thai (Bond et al. 1997: 199), although information provided by the hospital in Mae Sai during a site visit in late 1999 suggested that almost all the sex workers in that border town were from Myanmar, the vast majority from Shan State. No sex workers in the town of Aranyaprathet on the Thai-Cambodian border, were reported to be from either Cambodia or Viet Nam, however (IOM 1999: 20). All were Thai. On the Cambodian side of the border, sex workers were from both Cambodia and Viet Nam with one quarter from the latter country.

Whether HIV/AIDS was first diffused by foreigners into the homosexual and bisexual communities in Bangkok and from there by returning sex workers into the north remains unclear. What is clear is that it found a very fertile environment for propagation once it arrived in the north. It is worth bearing in mind, however, that this mountainous region is relatively sparsely populated compared with the densely populated regions to the west in South Asia and northeast in China (see figure 2). The implications of the possible diffusion of the epidemic to these densely populated areas on a scale similar to that seen in northern Thailand are grave indeed.

The above discussion should not give the impression that there is but a single centre of dissemination of the epidemic. However, HIV/AIDS originally reached Southeast Asia, there are now multiple centres of prevalence of the epidemic and the question remains whether there is but one type of epidemic or a series of different epidemics (Moodie 1997). In Thailand and the Lao PDR, the mode of transmission is predominantly (more than 80 per cent of cases) heterosexual, while in China, Malaysia and Viet Nam more than half of transmissions are estimated to be by IDUs. Transmission in the Philippines and Singapore, and possibly Cambodia, is also seen to be mainly through heterosexual contact; only Indonesia, and also the Philippines and Singapore, consider homosexual contact to be of any significance in their relatively low overall prevalence. Whether these differences represent real variations in the nature of the epidemic, whether they reflect different evolutionary stages in the development of a unitary system, or whether they represent differences in the nature of the reporting system and national perceptions of the disease is not known at present. Perhaps significantly, the category of "unknown" method of transmission is high for Cambodia, China, Malaysia and Viet Nam (see table 4).

ILLUSION

The linkages between the movement of people and the dissemination of HIV/AIDS, and between the movement of people and the creation of environments that facilitate rates of infection, are, as seen in an earlier section, intuitive. There are many subjective elements, both in the measurement of the movement of people and in the estimation of the number of HIV/AIDS carriers. To try to relate the two sets of data on migration and HIV/AIDS together to derive systematic relationships between them is altogether another matter. Is the current upsurge in HIV/AIDS in Southeast Asia a direct consequence of increased migration among the countries of the region? Is increasing mobility, both within and between countries, directly related to an increased prevalence of HIV/AIDS? Will a better understanding of how migration works lead to more effective policies that might contain and even reduce the spread of HIV/AIDS? Will policies that seek to manage migration in the region also facilitate a "management" of the HIV/AIDS epidemic? These appear to be valid and important questions: ones which not only pose difficult scientific issues but also raise significant moral and human rights issues as well.

(a) Illusion 1: border control will solve the problem

The focus of much of the existing research may have given the unintentional impression that, if only movement across borders could be controlled, then the dissemination of HIV/AIDS, too, might be controlled: to keep migrants out might in some way limit the spread of the disease. The Deputy Health Minister of Thailand was cited in a local newspaper as asserting that the cross-border movements of illegal workers was a major contributor to the spread of infection (*Bangkok Post*, 12 November 1999). There is, however, little evidence to suggest that foreign migrant groups might have a higher incidence of HIV/AIDS or engage in riskier behaviour than local populations (Oppenheimer et al 1998). One study in Chiang Rai province in northern Thailand indeed shows that the prevalence rate among a sample of migrants from Myanmar is higher and "indicates that immigrant workers have a substantially higher HIV prevalence rate than those who ... reside within their own country" (Supawitkul 1999: 8). However, to compare the prevalence of a local immigrant group with that of the national population as a whole, when it is known that the Thai prevalence in the north is significantly above the national average, appears to be creating the illusion of an immigrant threat. Although the author of a review of HIV/AIDS in Viet Nam admits that there has been no research in that country specifically to examine the impact of migration on the spread of HIV/AIDS, the writer avers that "while the evidence is not conclusive there is *empirical support for the existence of a strong relationship* between migrant flows and the HIV infection rates" (CARE 1997: 9, emphasis in the original). That empirical support is not documented.

(b) Illusion 2: most migrants spread diseases

A study of the relationships between young female Japanese tourists and Thai beachboys on the island of Phuket, Thailand, raises the "threat of AIDS infection" but does not identify a single case of actual transmission of HIV back to Japan (Vorakitphokatorn et al. 1995). An assessment of female labour migration in Asia refers to the low status of foreign domestic workers and further adds that it "is *thus possible* that the movement of female labour around the region *may* contribute to the

spread of this disease" (Weerakoon 1997: 72, emphasis added). She notes that just over 10 per cent of those diagnosed as HIV-positive in the Philippines up to mid-1992 believed that they had contracted the disease while overseas. Unfortunately, it is unclear whether any of these were among the many thousand Filipinos who were in the merchant marine, a particularly high-risk group. Some 40 per cent of confirmed female AIDS patients in Sri Lanka in early 1996 had been domestic workers overseas. However, those infected migrants numbered only 17 or 18 and given that over 100,000 women left Sri Lanka as domestic workers in 1994 and 1995 (Gunatilleke 1998: 124), these seem very small numbers indeed. Also, it was not at all clear from the evidence presented whether the women became infected before migrating overseas or during their sojourn as domestic workers. The point is that there is a widespread fear of the outsider, the foreign migrant, and often there is the illusion that they engage in undesirable practices.

A study that set out to examine the perceived likelihood that the 30,000-strong Filipina community of domestic servants, the vast majority living in or close to Kuala Lumpur, was a source of social ills in Malaysia clearly showed that the incidence of HIV/AIDS was low in the community and that they did not engage in high-risk behaviour (Remmelts et al. 1997). Analyses of the 150,000-strong community of Filipina domestic workers in Hong Kong do not identify HIV/AIDS as a major concern (see, for example, Constable 1997; Vasquez et al. 1995). Despite the implicit assumptions of much of the research undertaken in Asia, there appears to be no real evidence that might refute the generalization of Decosas and colleagues that "We have not seen any significant epidemic triggered by the arrival of immigrants from another country" (Decosas et al. 1995: 826). The time is perhaps right in Southeast Asia to demythologize HIV/AIDS and migration and focus on more practical ways of dealing with mobile populations and the disease.

SUBSTANCE

(a) Changing behaviour and HIV

Even given the difficulties with the available data, it does seem that the vigorous response of the authorities in Thailand to the rapid spread of the epidemic from the late 1980s has led to a decrease in the incidence of HIV/AIDS, as well as to the adoption of behaviour that might lessen its prevalence (UNAIDS 1998b). The numbers of new cases of reported HIV/AIDS declined markedly in 1997 to 7,445 from 20,766 in 1996. This trend is supported by survey data on HIV prevalence of the annual intake to the Thai army and among sex workers where the incidence appears to have stabilized, albeit at a high level. The impact of the programme of 100 per cent condom use enforced in commercial sex establishments was observed in the mid-1990s (Hananberg et al. 1994; Rojanapithayakorn and Hananberg 1995). The number of men frequenting sex workers appears to have declined by about half between 1990 and 1993 and the number of brothels in Bangkok dropped by about 60 per cent over the same period, according to data cited in UNAIDS (1998b).

The above trends should not inspire a feeling of complacency, though. There has also been a shift away from full-time, direct sex workers towards more part-time indirect workers who work from restaurants, bars or other places of entertainment. Sexual activity amongst "friends" in the workplace or at place of education appears to have increased. In these contexts, condom usage appears to be much lower than in commercial sex establishments. While villagers in Thailand have a general awareness of the dangers of HIV/AIDS and would use condoms in urban brothels, the view

appears to exist that the dangers of being infected in local contexts are not great. Sex behaviour has shifted away from sex workers towards local casual partners (Im-em 1999a).

(b) Systems of regular interaction

Within the rural environment, villagers are operating in the context of a known world amongst friends and regular acquaintances. There are, however, significant high-risk "nodes" within this environment which can be identified through circuits of population mobility. Regular or periodic markets and temple fairs define economic catchment areas of regular exchange. The classic study of such periodic markets as defining areas of human interaction is still Skinner (1964-65) for China although no similar work exists yet for Thailand. Essentially, a landscape can be divided into a hierarchy of zones of interaction defined on the basis of the spatial pattern and frequencies of markets. Local market areas, representing the most frequent fields of interaction, are "nested" into larger fields of less regular interaction. The ideal stages of abstraction for a region in China are shown in Figure 3. The theoretical basis of the argument need not detain us here, but the most important point for policy intervention is that key centres of exchange can be identified and areas of human interaction mapped. Markets bring villagers and town-based merchants together, creating critical linkages in urban-to-rural relations, social as well as commercial.

An environment for the ready transmission of HIV/AIDS is created by a number of factors: the regular occurrence of these markets; the close relationships developed between buyers and sellers; and the ready availability of cash and alcohol, and of local women whose husbands may themselves have migrated and been away for extended periods in cities or fishing communities. Because the situations are familiar, because sex is not the primary purpose of the visits to the markets and because risk is perceived to be "out there" and not in familiar rural contexts, villagers, both men and women, are highly vulnerable in such contexts. For a perceptive examination of cattle markets as "risk environments" in the northeast of Thailand, see Elkins et al. (1997). Women also dominate small-scale, local trade throughout Southeast Asia and are even found in certain types of long-distance trade where they may use their charms to secure better transactions, lower taxes at border points or preferential transport rates on boats and trucks (see Walker 1999). Women's mobile sexuality may indeed be dangerous for the spread of HIV in Southeast Asia and particularly in the context of familiar and regular commercial interactions.

(c) Migrants as a high-risk group

The most substantive point to emerge from this particular discussion is that migrants may not create the most high-risk environments for the diffusion of HIV/AIDS. In fact, the whole relationship between mobility and HIV/AIDS may be spurious despite its intuitive logic. Although there are assertions that migrants are away from home and lonely and that they turn to sex workers for solace, the incidence of HIV/AIDS among the international migrants identified earlier in the paper appears to be low. In several of the legal flows, of course, any carriers of HIV/AIDS are excluded through initial testing and subsequent regular testing at the destination, as is the case of Thai workers in Taiwan Province of China, for example. Not only are migrants operating in an unfamiliar and perceived high-risk environment where they will quickly adopt precautionary behaviour, but they also stand to lose their jobs if they contract the disease. Heavily indebted as many are, this is a risk that they will not be prepared to take. Even sex workers going overseas, trafficked or otherwise, are likely to operate in a relatively low-risk HIV/AIDS environment. They represent an investment for those who "employ" them which needs to be protected for commercial return. The vast majority of women going overseas

know precisely what occupation they are going to and are prepared for the risks involved. For an important corrective interpretation of the global sex industry, see Kempadoo and Doezema (1998).

No overall blanket conclusions can be drawn about the interrelationships between population mobility and HIV/AIDS. Rather, a hierarchical approach to the issue is necessary making a very general distinction between long-distance international migrants (cross-border movements excluded), internal urbanward migrations and regional mobility systems. In the case of long-distance international movements, the majority of movers are relatively well-educated – one of the most enduring fallacies about migration is that it is mostly driven by poverty and that it is the poorest who move (see Skeldon 1997a, 1997b) – and the majority appear not to engage in high-risk behaviour. In the case of internal systems of rural-to-urban mobility, the situation is more complex. In certain situations, because the city is "out there", there is quickly the perception of risk. The environment created by these migrants in the city should be one which is responsive to HIV/AIDS awareness programmes, rather than one which is a long-term "hot spot" for the continuous propagation of the disease. The success of the brothel-based Thai condom programmes appears to support this interpretation. Another example of the success of programmes which aimed to increase condom usage dramatically among sex workers was in Nairobi, Kenya, where estimates of 10,000 infections averted per year have been made (World Bank 1999).

Such sex worker programmes are clearly key elements at particular stages in the development of the epidemic. The critical area now, however, lies in those more local, community-based situations in which rural and some urban people find themselves. Some of these communities may indeed extend across border areas as at Ranong, which has a population of virtually equal numbers of Thai and Myanmar nationals (Chantanavich et al. 1999b). Some cross-border networks would incorporate temple fairs and periodic markets. The significant dimension, however, is not the cross-border mobility itself, which can be considerable, but how these communities are linked back into their hinterlands through circuits of human mobility. While the existing cross-border studies have generated a wealth of valuable information, the impression given is of isolated "hot spots" whereas the border towns are integral links in broader systems of regional mobility.

(d) The importance of situation

Within any nation, there are intense networks of human interaction based around a hierarchy of markets. It is there that local people feel "at home" in familiar environments and can engage in high-risk behaviour. Rather than identifying particular mobile groups such as truck drivers and their routes, it may be best to focus on the hierarchy of commercial centres of interaction that link truck drivers, cattle salesmen, bus drivers and so on with the population at large. That is, the focus must be on situation rather than occupation. It is important to realize that everyone is mobile to some extent and it is incumbent upon the policy analyst to identify the circuits of mobility, and the key nodes in the circuits. The very success of the Thai HIV/AIDS programme has tended to make the epidemic less visible in the sense that the epidemic has been pushed down from the more visible world of the urban-based commercial sex worker to the less visible local community level which will represent a different kind of policy challenge.

Not all countries in Southeast Asia have reached such a stage and the sex worker and brothel may still be the most appropriate point for intervention. Nevertheless, countries need to be prepared both for subsequent less visible situations, such as the one currently facing Thailand, as well as pre-existing ones before they have evolved into large-scale epidemics in the sex sector. The Lao PDR

and Cambodia, too, might benefit from rural-based programmes at key points in local systems of circulation around markets and fairs. In the Lao PDR, festivals associated with the Buddhist calendar, sports events and trade fairs, which the government is actively promoting, have all already been identified as potential sites for the launching of HIV/AIDS prevention activities (UNDP 1998: 31-32). Societies that might see their "sex culture" to be more closed than that of Thailand have thriving market exchanges too, as well as village-based festivals such as those associated with "wayang kulit" (shadow puppet play). As the essays in Lim (1998) make clear, sex work is not unique to any single culture in Southeast Asia even if it is more developed in certain places than others. A major issue is still to increase public awareness, as well as of the awareness of the authorities, of the potential for the transmission of HIV/AIDS at the formal and informal venues where it occurs.

(e) The real significance of high-risk groups

Certainly, the patterns of mobility of sex workers, as critical components in the transmission of HIV, must still continue to be important elements in the equation, and the networks identified by Bond et al. (1997) represent a significant step in this direction. Curiously, a work examining sex workers, HIV and mobility in Kuala Lumpur has virtually nothing to say on the mobility of sex workers, except to assume that it exists. Where these sex workers come from and their patterns of movement are never examined (Wolffers and Bevers n.d.). Nevertheless, it now seems apparent that greater attention needs to be paid to the less formal networks of ordinary people as they go about their everyday business. There are indeed "hot spots" of high-risk behaviour, with a high prevalence of HIV/AIDS, but it is the way in which these points are linked with the wider population that is important.

The interaction of members of high-risk groups with their communities is important. It is known, for example, from a series of studies (TSRT n.d.(a); n.d. (b)) that fishermen, and seamen in general, have traditionally engaged in drug, alcohol and sexual behaviour that favours the rapid development of sexually transmitted diseases and HIV/AIDS. Infected fishermen go back to their villages where they may pass on the disease to their families or local sex networks. The villages of origin of many of the Thai fishermen are highly localized in the northeast part of the country and increased mortality has already been observed. For example, in Warisawat village in Roi-et province, 25 people had died from AIDS "in recent years", all fishermen save one fisherman's wife (TSRT n.d.(b)). Links back to communities need not simply involve the return of longer-term migrants from high-risk occupations. The return of people to their communities even after just a few hours at a local "hot spot", which may be a market or temple fair, could have a potentially devastating impact on that community, given that so much of sex behaviour appears to be groups of friends under intense peer pressure fuelled by alcohol and other substance consumption. Data to support such an allegation are, however, lacking, which brings us back to the subjective nature of much of the research on HIV/AIDS and population movement. One factor that is much more clearly understood, however, is the cost of care of returned HIV/AIDS villagers, which is disproportionately greater for the poorest rural households (Kongsin 1997).

DISCUSSION

(a) Of migration and mobility

This paper has attempted to move migration from the centre of consideration in the intuitive linkages between population movement and HIV/AIDS and to replace it with mobility, and particularly local mobility within circuits of regular interaction. Essentially everyone in a population is mobile to some extent and while some are certainly more mobile than others, and some engage in higher-risk behaviour than others, hierarchies of nodes of interaction exist which may be critical for the next phase of intervention in the HIV/AIDS epidemic. The task is to identify these circuits of mobility at the community level in order to render visible the hidden dimensions of the recent propagation of the disease. The emphasis shifts, therefore, from one based upon particular groups of people, and often specific occupations, towards situations through a focus on systems of human mobility. It is a shift away from risk groups to risk behaviour that is located in specific places at specific times.

In turning the focus away from the international migrant, yet another important dimension can be highlighted. This concerns the attempts to exclude migrants on the basis that they are a significant health risk to indigenous communities. This paper has attempted to demonstrate that migrants as such are a much lower risk than the localized circuits of mobility within countries. Resources to screen migrants for HIV/AIDS might therefore be better deployed to the local "hot spots" of internal mobility. The International Organization for Migration and the United Nations High Commissioner for Refugees (UNHCR) have trenchantly argued that no discrimination should be made on the basis of HIV status. Clearly, no country wishes to import groups that may eventually become burdens on their health care systems, particularly countries in the developing world. However, the additional risks relative to the expense of universal screening appear to be negligible relative to the growth in HIV/AIDS carriers within national populations. It is important to keep this relative balance in mind in the formulation of policy. Currently, no international conventions or regulations specifically address HIV/AIDS and mobility (UNAIDS and IOM 1998: 453).

It is still too early to come to any meaningful conclusion on the possible impact of the economic crisis in Southeast Asian countries on the commercial sex industry. Its overall impact on regional flows of population mobility may not have been as great as initially thought (Skeldon 1999). Nevertheless, a rise in female unemployment may have encouraged some to seek income through the informal sex economy. Whether the crisis has promoted higher-risk behaviour, however, is another question to which there is no answer at present.

(b) Poverty and HIV

There is a remarkable correlation between the distribution of regions of greater incidence of HIV/AIDS in Thailand with the areas of greatest relative deprivation. The issue of HIV/AIDS is primarily a general development issue and not one simply of migration, or even of mobility and immobility, despite all the intuitive and real linkages that have been considered in this paper. The most effective programmes to deal with the spread of HIV/AIDS, and to accommodate those infected, will be within broad-based development programmes. While poverty can never be said to

cause HIV/AIDS, in exactly the same way that poverty does not cause population mobility, the incidence of HIV/AIDS is clearly associated with poverty in important ways.

The simple lack of alternatives to sex work as an occupation for young women to help to provide for their families is a major failing in many parts of Southeast Asia. The research findings on sex workers have shown that the majority of women entered the occupation voluntarily, aware of the type of activity in which they would be involved (Boonchalaksi and Guest 1998; Podhista et al. 1994). The trafficking of deceived women represents a small minority of all those entering the profession. However, the sense of responsibility felt by daughters that they must support parents and siblings, and by mothers that they must maintain their children, does not mean that commercial sex work is the preferred occupation. A distinction between forced and voluntary entry becomes largely academic in societies where alternatives are lacking and occupations are survival strategies for the family. A corollary policy implication is that policies to restrict or repress either trafficking or sex work are likely to rebound against women and their families without a simultaneous creation of greater economic opportunity. The latter implies, unfortunately, long-term structural change rather than short-term "quick fix" solutions.

Lest it be thought that the current apparent prevalence of sex work is a uniquely Asian or even "third world" characteristic, it must be remembered that the London of the nineteenth century was host to perhaps 80,000 full-time and part-time sex workers (see Trudgill 1973). While nineteenth-century Britain did not have to combat a sexually transmitted disease on a scale equivalent to HIV/AIDS (just over one per cent of children were infected with congenital syphilis, for example), it did have to confront many other types of diseases with high mortality.

(c) Development policy and HIV

Short-term development projects can and do increase the incidence of HIV/AIDS. For example, the construction of a dam inundated farmland and left women little alternative activity but to enter local sex work in one part of Ghana (Decosas 1996). The construction of dams and roads, by bringing together substantial numbers of male labourers for the duration of the project, fosters the development of sex work in its wake in exactly the same way that the "camp followers" trailed the armies of old. Despite short-term development projects that can promote HIV/AIDS, long-term development does unquestionably reduce mortality and disease and development has never occurred without population movements to urban areas.

The tensions between short-term and long-term forces render problematic any intervention strategies to deal with an epidemic such as HIV/AIDS. At one level, there is the issue of the perception of risk. It is argued that, once people understand the risks involved, they will adjust their behaviour accordingly in order to reduce high-risk activities. Clearly, the data on declining incidence of new cases of HIV in Thailand indeed shows how behaviour has been changed among certain sectors of the population. Nevertheless, some groups persist in engaging in high-risk behaviour, particularly where lifestyles are dominated by risk and where there are few risk-free alternatives. For example, fishermen are often in high-risk situations and are much more concerned about injury on board ship or immediate loss of life at sea than about exposure to a disease through a sex worker that will bring death at some indeterminate time in the future.

At entirely another level, the tension created by the need for short-term, immediate responses to particular high-risk situations may divert attention away from current low-risk groups that, if left

unattended, may compound the future course of the epidemic. We do not know who the highly mobile groups of tomorrow will be, but if pre-pubescent children, currently low-risk, are ignored, the potential future direction of the epidemic is not being addressed. Everyone is a potential future migrant and hence broad-based proactive education programmes in schools need to be implemented in tandem with the more focused reactive intervention for specific situations. This does not mean that programmes geared to the immediate problems of the most vulnerable groups should be disbanded but that these need to be implemented within broader programmes to emphasize to the population as a whole their potential vulnerability.

Programmes to control the incidence of HIV/AIDS need to be incorporated into overall development programmes in which mobility is an integral part. Any attempts to control the disease by restricting population migration or mobility are unlikely to meet with success. Population mobility has always been the demographic variable least responsive to policy intervention and programmes to restrict or reverse movement towards urban areas have been marked by failure over all but the short term under very specific political conditions (Skeldon 1990). Cross-border movement can be controlled to some extent through rigorous and expensive enforcement. The growth of illegal movements in the economies of Southeast Asia, however, primarily reflects a sustained increase in demand for labour in destination areas and demonstrates the failure of countries to devise adequate channels to permit legal movement.

Thus, intervention to control the epidemic of HIV/AIDS through the control of human movement is unlikely to succeed. It has been argued in this paper that a focus on particular highly mobile groups may not be the most fruitful method for intervention. Rather, intervention may be most profitably implemented at specific nodes of high-risk behaviour which are both space and time-specific. The concentration on brothel-based sex workers in Thailand clearly met with success at a particular stage in the development of the epidemic. The next stage may be to identify those nodes in circuits of regular mobility where high-risk behaviour is prevalent, which may be in familiar environments such as local markets or fairs. Programmes to increase awareness throughout villages to prepare men and women before departure or before visiting local market centres can be implemented but these will only be successful ultimately if complete coverage can be attained. More focused intervention in high-risk locations may prove to be a more cost-effective, if short-term, approach to controlling the epidemic. Local government officials, NGOs working at the village level, as well as employers who can be educated that it is in their interest to look after the welfare of their employees irrespective of their migrant status will all be key players at this level of intervention.

Development increases human movement and no sustainable development has yet occurred without massive mobility both internally or externally. This paper has drawn attention to the myriad forms that these movements can take. While the relationship between mobility and the spread of HIV/AIDS is intuitively obvious, it is necessary to see virtually the total population as being at risk if programmes to deal with the epidemic are to be successful, simply because the vast majority of the population is involved in some kind of movement.

The experience of Thailand is instructive in Southeast Asia because of its willingness to confront the epidemic. The strategies implemented there appear to have been effective at certain stages of the epidemic. Much remains to be achieved in Thailand, however, as the epidemic has evolved. This paper has attempted to identify effective ways forward through a focus on the systems or networks of population movement that link populations both within and across countries. Such approaches have but been partially addressed in the Thai context. Other governments in the region, in countries either where the epidemic is not as well developed or where attitudes towards the disease

are not as responsive, may learn much from the Thai experience: from the undoubted successes and from the difficulties still to be faced. A focus on total systems of population mobility, and on risk behaviour at key points in those networks, seems to be a more effective strategy for intervention than simply concentrating on supposedly more mobile groups or on migrants. The focus on the latter reinforces a fear of, and prejudice towards, the outsider, while shifting attention away from the real dangers of infection through other forms of mobility that are inherent in the week-to-week, or even day-to-day, behaviour of the population as a whole.

REFERENCES

Appleyard, R. and A. Wilson (eds.) 1998. "Migration and HIV/AIDS", *International Migration*, vol. 36(4), special issue.

ARCM 1995. Report of the Technical Consultation on Information regarding Population Movements and HIV/AIDS, Bangkok, Asian Research Center for Migration, Chulalongkorn University.

Bond, K.C., D.D. Celentano, S. Phonsophaikul and C. Vaddhanaphuti 1997. "Mobility and migration: female commercial sex work and the HIV epidemic in northern Thailand", in G. Herdt (ed.) *Sexual Cultures and Migration in the Era of AIDS: Anthropological and Demographic Perspectives*, Oxford, Clarendon Press, pp. 185-215.

Boonchalaksi, W. and P. Guest 1998. "Prostitution in Thailand", in L. L. Lim (ed.) *The Sex Sector: The Economic and Social Bases of Prostitution in Southeast Asia*, Geneva, International Labour Office, pp. 130-169.

CARE 1997. An Overview of the Situation in relation to HIV/AIDS in the Socialist Republic of Vietnam, Hanoi, CARE Vietnam.

Chamratrithirong, A., K. Archavanitkul, K. Richter, P. Guest, V. Thongthai, W. Boonchalaksi, N. Piriyaathamwong and P. Vong-ek 1995. *National Migration Survey of Thailand*, Salaya, Institute for Population and Social Research, Mahidol University.

Chantavanich, S., A. Beesey, A. Amaraphibal, P. Suwannachot, P. Wangsiripaisal and S. Paul 1999a. "Cross-border migration and HIV/AIDS vulnerability at the Thai-Cambodia border: Aranyaprathet and Khlong Yai", Bangkok, Asian Research Center for Migration, Chulalongkorn University, report submitted to the World Health Organization.

Chantavanich, S., S.K. Paul, P. Wangsiripaisal, P. Suwannachot, A. Amaraphibal and A. Beesey 1999b. "Cross-border migration and HIV vulnerability in the Thai-Myanmar border: Sangkhlaburi and Ranong", Bangkok, Asian Research Center for Migration, Chulalongkorn University, report submitted to the World Health Organization.

Constable, N. 1997. *Maid to Order in Hong Kong: Stories of Filipina Workers*, Ithaca, Cornell University Press.

Decosas, J. 1996. "HIV and development" *AIDS*, vol. 10 (supplement 3): S69-S74.

Decosas, J., F. Kane, J.K. Anarfi, K.D.R. Sodji and H.U. Wagner 1995. "Migration and AIDS", *Lancet*, vol. 346: 826-828.

Derks, A. 1999a. "Trafficking of Cambodian women and children to Thailand", in *Paths of Exploitation: Studies of the Trafficking of Women and Children between Cambodia, Thailand and Viet Nam*, Geneva, International Organization for Migration, pp. 47-106.

Derks, A. 1999b. "Trafficking of Vietnamese women and children to Cambodia", in *Paths of Exploitation: Studies of the Trafficking of Women and Children between Cambodia, Thailand and Viet Nam*, Geneva, International Organization for Migration, pp. 107-163.

Elkins, D.B., L.R.Dole, K.Boonjeur, S.Phiensrithom and E.Maticcka-Tyndale 1997. "Cattle markets and festivals: development of HIV/AIDS prevention interventions for specific risk situations in rural Northeast Thailand", in *Proceedings of the Symposium on Population, Health and the Environment*, Chiang Mai, Department of Geography, Chiang Mai University and the International Geographical Union, Commission on Population and the Environment, pp.38-48.

Guest, P. 1999. "Overview of the population mobility situation in Asia and its implications for HIV/AIDS", paper presented at the Fifth International Congress on AIDS in Asia and the Pacific, Kuala Lumpur, 20-27 October.

Gunatilleke, G. 1998. "Macroeconomic implications of international migration from Sri Lanka", in R. Appleyard (ed.) *Emigration Dynamics in Developing Countries Volume II: South Asia*, Aldershot, Ashgate, pp.113-146.

Hanenberg, R.S., W.Rojanapithayakorn, P.Kunasol and D.C.Sokal 1994. "Impact of Thailand's HIV-control programme as indicated by the decline of sexually transmitted diseases", *Lancet*, vol. 344: 243-245.

Haour-Knipe, M. and R.Rector 1996. *Crossing Borders: Migration, Ethnicity and AIDS*, London, Taylor and Francis.

Herd, G. (ed.) 1997. *Sexual Cultures and Migration in the Era of AIDS: Anthropological and Demographic Perspectives*, Oxford, Clarendon Press.

Hugo, G. 1982. "Circular migration in Indonesia", *Population and Development Review*, vol. 8: 59-83.

Im-em, W. 1999a. "Changing partner relations in the era of AIDS in upper-north Thailand", in J.C.Caldwell, P.Caldwell, J.Anarfi, K.Awusabo-Asare, J.Ntozi, I.O.Orubuloye, J.Marck, W.Cosford, R.Colombo and E.Hollings (eds.), *Resistances to Behavioural Change to Reduce HIV/AIDS Infection in Predominantly Heterosexual Epidemics in Third World Countries*, Canberra, National Centre for Epidemiology and Population Health, Australian National University.

Im-em, W. 1999b. *Mortality Trends and Levels to Verify the AIDS Epidemic in Thailand: Analysis from Death Registration Statistics, 1984-1997*, Salaya, Institute for Population and Social Research, Mahidol University.

IOE 1997. "Socio-economic conditions of migrants and transport workers in border areas of Myanmar and HIV transmission", Yangon, Institute of Economics, mimeo report submitted to the United Nations Development Programme.

IOM 1999. "Survey of Cambodian and Vietnamese sex workers in brothels along the Thai-Cambodian border", in *Paths of Exploitation: Studies on the Trafficking of Women and Children between, Cambodia, Thailand and Viet Nam*, Geneva, International Organization for Migration, pp.18-30.

Jones, G.W., E.Sulistyaningsih and T.H.Hull 1998. "Prostitution in Indonesia", in L.L.Lim (ed.), *The Sex Sector: The Economic and Social Bases of Prostitution in Southeast Asia*, Geneva, International Labour Office, pp.29-66.

Kempadoo, K. and J.Doezema (eds.) 1998. *Global Sex Workers: Rights, Resistance, and Redefinition*, New York, Routledge.

Kongsin, S. 1997. "Economic impacts of HIV/AIDS on households in rural Thailand", in G.Linge and D.Porter (eds.), *No Place For Borders: The HIV/AIDS Epidemic and Development in Asia and the Pacific*, St Leonards NSW, Allen and Unwin, pp.89-101.

Lim, L.L. (ed.) 1998. *The Sex Sector: The Economic and Social Bases of Prostitution in Southeast Asia*, Geneva, International Labour Office.

Linge, G. and D. Porter (eds.) 1997. *No Place for Borders: The HIV/AIDS Epidemic and Development in Asia and the Pacific*, St Leonards NSW, Allen and Unwin.

Moodie, R. 1997. "The situation now and possible futures", in G. Linge and D.Porter (eds.), *No Place for Borders: The HIV/AIDS Epidemic and Development in Asia and the Pacific*, St Leonards NSW, Allen and Unwin, pp.24-40.

Oppenheimer, E, M.Bunnag and A.Stern 1998. *HIV/AIDS and Cross-border Migration: A Rapid Assessment of Migrant Populations along the Thai-Burma (Myanmar) Border Regions*, Bangkok, Asian Research Center for Migration, Chulalongkorn University.

Phongpaichit, P. 1982. *From Peasant Girls to Bangkok Masseuses*, Geneva, International Labour Office.

Podhista, P., A.Pramualratana, U.Kanungsukkasem, M.J.Wawer and R.McNamara 1994. "Socio-cultural context of commercial sex workers in Thailand: an analysis of their family, employer, and client relations", in J.Cleland and P.Way (eds.), "AIDS impact and prevention in the developing world: demographic and social science perspectives", *Health Transition Review: Supplement to Volume 4*, pp.297-320.

Remmelts, R., I.Wolffers, I.Fernandez, A.Fernandez, S.Verghis and C.Arumanayagam 1997. *What Do Filipina Domestic Helpers in Malaysia Know about HIV/AIDS*, Kuala Lumpur, CARAM-Asia and the Free University of Amsterdam.

Rojanapithayakorn, W. and R.Hanenberg 1995. "The 100% condom program in Thailand", *AIDS*, vol. 10 (1): 1-7.

Singhanetra-Renard, A. 1981. "Mobility in north Thailand; a view from within", in G.W.Jones and H.V.Richter (eds.), *Population Mobility and Development: Southeast Asia and the Pacific*, Canberra, Development Studies Centre Monograph No. 27, Australian National University, pp. 137-166.

Skeldon, R. 1986. "Migration and the population census in Asia and the Pacific: issues, questions and debate", *International Migration Review*, vol. 21(4): 1074-1100.

Skeldon, R. 1990. *Population Mobility in Developing Countries: A Reinterpretation*, London, Belhaven.

Skeldon, R. 1997a. *Migration and Development: A Global Perspective*, London, Longman.

Skeldon, R. 1997b. "Rural-to-urban migration and its implications for poverty alleviation", *Asia-Pacific Population Journal*, vol. 12(1): 3-15.

Skeldon, R. 1999. "Migration in Asia after the crisis: patterns and issues", *Asia-Pacific Population Journal*, vol. 14 (3).

Skinner, G.W. 1964-65. "Marketing and social structure in rural China", *Journal of Asian Studies*, vol.24: 3-44; 195-228; 363-400.

Stern, A. 1998. "International population movements and public health in the Mekong region: an overview of some issues concerning mapping", *Southeast Asian Journal of Tropical Medicine and Public Health*, vol. 29(2): 201-212.

Supawitkul, S., B.Supawitkul, S.Srisudthiwong, S.Sinsonboonthong, M.Koedkan and M.Janssen 1999. "Immigrant workers and HIV/AIDS: prevalences, barriers and service model in an HIV-epicenter, northern Thailand", paper presented at the Fifth International Congress on AIDS in Asia and the Pacific, Kuala Lumpur, 20-27 October.

Trudgill, E. 1973. "Prostitution and paterfamilias", in H.J.Dyos and M.Wolff (eds.), *The Victorian City: Images and Realities*, New York, Columbia University Press, pp. 693-705.

TSRT n.d.(a). "Profiling the maritime industry and responses to HIV and drug use among seafarers in Ranong, Thailand", Bangkok, the Thailand Seafarers Research Team, Ministry of Public Health, UNAIDS, UNDCP and UNICEF.

TSRT n.d.(b). "Profiling seafarer source communities and responses to HIV and drug use among seafarers in northeast Thailand", Bangkok, the Thailand Seafarers Research Team, Ministry of Public Health, UNAIDS, UNDCP and UNICEF.

UNAIDS 1998a. "HIV and health care reform in Phayao: from crisis to reform", Bangkok, UNAIDS, draft report.

UNAIDS 1998b. *Relationships of HIV and STD Declines in Thailand to Behavioural Change*, Geneva, UNAIDS.

UNAIDS and IOM 1998. "Migration and AIDS", *International Migration*, vol. 36(4): 445-468.

UNDP 1998. "Rapid applied research and STD/HIV AIDS prevention in the Lao People's Democratic Republic", Vientiane, United Nations Development Programme.

UY 1997. "A study of psychological/behavioural factors related to HIV/AIDS infection in border areas", Yangon, Department of Psychology, University of Yangon.

Vasquez, N.D., L.T.Tumbaga and M.Cruz-Soriano 1995. Tracer Study of Filipino Domestic Helpers Abroad: The Socio-economic Conditions of Filipino Domestic Workers from Pre-departure until the End of their First Two-year Contract in Hong Kong, Geneva, International Organization for Migration.

Vorakitphokatorn, S., R.A.Cash, T.Chosa and Y.Sakurai 1995. *AIDS Risk among Tourists: A Study on Japanese Female Tourists in Thailand*, Salaya, Institute for Population and Social Research, Mahidol University.

Walker, A. 1999. "Women, space, and history: long-distance trading in northwestern Laos", in G.Evans (ed.), *Laos: Culture and Society*, Chiang Mai, Silkworm Books, pp. 79-99.

Weerakoon, N. 1997. "International female labour migration: implications of the HIV/AIDS epidemic in the Asian region", in G.Linge and D.Porter (eds.), *No Place for Borders: The HIV/AIDS Epidemic and Development in Asia and the Pacific*, St Leonards NSW, Allen and Unwin, pp. 67-77.

Wolffers, I. and M.Bevers n.d. *Sex Work, Mobility and AIDS in Kuala Lumpur, Malaysia*, Kuala Lumpur, CARAM-Asia and the Free University of Amsterdam.

World Bank 1999. *Confronting AIDS: Public Priorities in a Global Epidemic*, New York, Oxford University Press.

WTO 1999. *Yearbook of Tourism Statistics*, Madrid, World Tourism Organization.

ANNEX OF TABLES AND FIGURES

Table 1. Estimated number of foreign workers in Asian labour-importing countries and areas, latest year available (thousands)

	Total foreign workers	Country of origin				
		Indonesia	Philippines	Thailand	China	OtherAsia
Malaysia	2 500	750+ (1 000)	100+(400)	79+(33)	..	305
Thailand	1 260	..	5	..	60	944*
Singapore	450	100	60	60	46	..
Japan	1 354	n.a.	84+(43)	18+(39)	234+(38)	680**+(88)
Hong Kong, China	..	50	120	18	..	39
Taiwan Province of China	297	9	84	138	21	..
Republic of Korea	210	15	23+(15)	9+(6)	28+(49)	56+(20)

Sources: The Social Impact of the Asian Financial Crisis, Bangkok, International Labour Office for Asia and the Pacific, 1998, p. 28.

Notes: Estimates of the number of undocumented migrants is given in parentheses.

* Mostly from Myanmar.

** There were some 680,000 registered Koreans in Japan

Table 2. Stock estimates of the numbers of overseas workers from selected Asian countries, mid-1990s

Country	Year	Stock
China	1996	380 000
Indonesia	1997	2 404 000
Malaysia	1995	200 000
Myanmar	1995	415 000
Philippines	1997	4 570 000
Thailand	1995	445 000

Sources: G. Hugo, "Migration and mobilization in Asia: an overview", in E. Laquian, A. Laquian and T. McGee (eds.). *The Silent Debate: Asian Immigration and Racism in Canada*, Vancouver, Institute of Asian Research, University of British Columbia, 1998, p.166 (modified).

Table 3. Estimates of the distribution of HIV/AIDS in the countries of Southeast Asia, end 1997

Country	Estimated number of carriers	Estimated number of AIDS cases	Estimated number of AIDS deaths	Reported cases of AIDS
Brunei Darussalam	300	..	..	..
Cambodia	130 000	18 000	15 000	978
China	400 000	9 000	6 400	281
Indonesia	52 000	4 800	3 900	153
Lao PDR	1 100	240	210	77
Malaysia	68 000	6 900	5 700	1 386
Myanmar	440 000	100 000	86 000	1 822
Philippines	24 000	1 600	1 300	321
Singapore	3 100	290	<500	359
Thailand	780 000	260 000	230 000	70 013
Viet Nam	88 000	8 700	7 200	1 202

Sources: Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases, Geneva, UNAIDS and WHO, June 1998.

**Table 4 Modes of transmission of HIV/AIDS in the countries of Southeast Asia, end 1999
(percentages and absolute totals)**

Country	Hetero-sexual	Homo sexual/ bisexual	IDU	Blood	Peri-natal	Other unknown	Total
Brunei Darussalam	..	..	..	..	..	..	..
Cambodia	36	1	0	0	20	44	978
China	19	3	50	9	0	19	281
Indonesia	48	39	2	2	1	9	153
Lao PDR	96	0	0	0	4	0	77
Malaysia	22	3	55	1	1	19	1 386
Myanmar	..	..	..	..	..	..	..
Philippine	53	35	1	3	2	7	321
Singapore	66	28	2	1	1	3	359
Thailand	80	1	6	0	5	7	70 013
Viet Nam	18	0	66	0	0	16	1 202

Sources: Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases, Geneva, UNAIDS and WHO, June 1998.

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